

11-15-01

**MEMORANDUM**

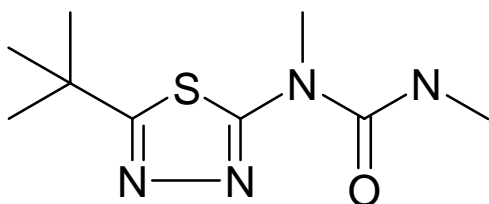
SUBJECT: **Tebuthiuron.** List A Reregistration Case 0054. PC Code 105501.  
**Product Chemistry Chapter for the Tolerance Renewal Eligibility Decision [TRED] Document.** DP Barcode D277104.

FROM: K. Dockter, Chemist  
Reregistration Branch 2  
Health Effects Division [7509C]

THRU: Alan Nielsen, Branch Senior Scientist  
Reregistration Branch 2  
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TO: Paula Deschamp, Risk Assessor  
Reregistration Branch 2  
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Tebuthiuron {N-[5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl]-N,N'-dimethylurea} is a non-selective herbicide.



Empirical formula: C<sub>9</sub>H<sub>16</sub>N<sub>4</sub>OS  
Molecular weight: 228.3  
CAS Registry No.: 34014-18-1  
PC Code: 105501

Chemical structure by J. Punzi

A search of REFS conducted 10/12/01 identified a single tebuthiuron technical [T] registered under PC Code 105501, the Dow Agrosciences LLC *Spike\* Technical* 99 % T; EPA Reg. No. 2719-109. It is subject to a TRED.

The Reregistration Eligibility Decision Document issued 6/94.

The Registration Standard issued 7/87.

The product chemistry data base is essentially complete. There are no reported impurities of toxicological concern in tebuthiuron. The Series 830 physical and chemical properties are given in the table below.

GLN		MRID	Data
6302	Color	40493802	off-white
6303	Physical state	“	crystalline solid
6304	Odor	“	pungent
7200	MP	“	161.5-164 C
7300	Bulk density	“	0.579 g/cc
7840	Water solubility	“	2.5 mg/mL @ 25 C
7950	vp	“	$2 \times 10^{-6}$ mm Hg @ 25 C
7550	log P <sub>ow</sub>	“	1.79
6313	Stability	“	stable for 3 yrs & for 6 mo. @ normal and elevated temperatures, respectively. No light instability or corrosiveness to metal has been observed.

cc: Reg. Std. file, RF, Dockter, S. Piper, R. Fricke.  
RD\I Tebuthiuron TRED Team.  
7509C:RRB2:Rm712N:57886:KD/kd  
Tebuthiuron.TRED [982] = D277104.mem.